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# **TECHNICAL MEMORANDUM #6**

DATE:	January 31, 2025	
то:	Project Management Team	
FROM:	Garth Appanaitis, PE   DKS Associates	
	Hallie Turk   DKS Associates	
	Emily D'Antonio   DKS Associates	

SUBJECT: Task 4.2 Sweet Home TSP Future Alternatives and Funding Opportunities



Project #20020-015

#### INTRODUCTION

The purpose of this memorandum is to identify transportation projects that address the deficiencies and needs for Sweet Home's transportation network as outlined in **Tech Memo #5, Future System Conditions**. These projects are intended to help Sweet Home manage its transportation system by moving towards the community's goals while accommodating future growth.

The following sections describe Sweet Home's transportation needs for motor vehicles, active transportation modes, freight, and safety, along with recommended alternatives to address each need. The projects are categorized accordingly:

- Motor Vehicle Capacity (C)
- Active Transportation (A)
- Railroad (R)
- Downtown Streetscape
- Safety (S)
- Smart Mobility (E)

The memorandum also summarizes existing and potential transportation revenue sources for the City to consider. The memorandum summarizes approximately \$175 million in total projects to address Sweet Home's transportation needs over the 20-year planning horizon. The City is projected to have approximately \$3.1 million available for funding a subset of those needs over the planning horizon.

A future document (Technical Memorandum 9 Preferred Alternatives) will summarize the planned project alternatives and identify the subset of the financially constrained project list that is anticipated to be funded within the available revenue sources.

#### **PROJECT CONSIDERATIONS**

Projects that propose changing an intersection's traffic control on ODOT's system would require additional study as part of an Intersection Control Evaluation (ICE) to be conducted before design per ODOT standards to determine the appropriate control treatment.

In addition, it should be noted that Main Street (US 20) is an ODOT-designated reduction review route. Any proposed projects on Main Street must be planned, designed, and constructed in coordination with the Mobility Advisory Committee (MAC).

# **PROJECT EVALUATION PROCESS**

The following sections identify potential solutions to address the various transportation needs. Each project was evaluated using ten criteria to determine alignment with the transportation goals. These goals and criteria include:

- Goal 1: Mobility, Accessibility, Connectivity
  - <u>Criterion 1: Improve vehicle capacity and/or network connectivity</u> Project inclusion of capacity or connectivity component.
  - <u>Criterion 2: Improve active transportation network</u> Project inclusion and focus of active transportation components.
- Goal 2: Safety
  - <u>Criterion 3: Improve safety for all modes</u> Projects provide a safety benefit.
  - <u>Criterion 4: Mitigate crash risk at existing high-crash locations</u> Projects that address an identified high-crash location.
- Goal 3: Quality of Life
  - <u>Criterion 5: Connect the City through bicycle and pedestrian paths</u> Project provides connection and/or addresses a bike or ped gap.
  - <u>Criterion 6: Minimize impacts on existing land uses</u> Project has minimal impact on adjacent system (e.g., no parking removal and/or additional right of way requirements).
- Goal 4: Economic Development
  - <u>Criterion 6: Provide facilities to connect the public to downtown and recreational opportunities</u>
     The project provides a connection between downtown and recreational opportunities.
  - <u>Criterion 7: Manage arterials</u> The project provides improvement to support the arterial system.
- Goal 5: System Management and Maintenance
  - <u>Criterion 8: Streets should operate with their intended purpose</u> The project is located on a higher functional class facility that is intended to serve more movement.
  - <u>Criterion 9: Support growth and/or maximize travel options</u> The project improves capacity to vehicle or other modes of transportation.

For each project, each criterion was evaluated on a score of 1 to 5 based on how well each criterion was addressed. A maximum score of 50 would indicate a project that aligned well with all transportation criteria. The project scoring matrix and additional information about the criteria are

included in the appendix. The project scoring does not directly infer project priority but may be used to develop prioritization strategies with the preferred project list.

While not directly reflected in the project scoring, project feasibility was also incorporated into the project alternatives and considerations for types of treatments. Project feasibility is an important consideration so that project lists and plans reflect conditions that are more likely to be implemented. Project alternatives that would have increased additional costs and risks associated with requiring additional right of way or replacing existing facilities were generally avoided where a less impactful option was available.

### MOTOR VEHICLE ALTERNATIVES

#### VEHICLE CAPACITY NEEDS

Future traffic operations and needs were previously identified for the year 2045 using HCM 6<sup>th</sup> Edition methodology. The results were then compared with the minimum acceptable operating standards, as shown in **Table 1**, as reported in **TM 5**.

Four intersections would not meet mobility targets in the year 2045: Main Street (US 20)/Pleasant Valley Road, Main Street (US 20)/22<sup>nd</sup> Avenue, Main Street (US 20)/Clark Mill Road, and Main Street (US 20)/47<sup>th</sup> Avenue.

#### TABLE 1. EXISTING (2021) AND FUTURE BASELINE (2045) OPERATIONS AT STUDY INTERSECTIONS THAT EXCEED MOBILITY TARGET

INTEDSECTION	CONTROL	MOBILITY TARGET	EXISTING			FUTURE BASELINE 2045		
INTERSECTION	ΤΥΡΕ <sup>Δ</sup>		LOS	DELAY <sup>B</sup> (SEC)	V/C <sup>c</sup>	LOS	DELAY (SEC)	V/C
1. MAIN STREET (US 20) AND PLEASANT VALLEY ROAD	TWSC	v/c ≤ 0.85	A/F	10/97	0.23 <b>/</b> 0.91	A/F	10/>100	0.25 <b>/</b> <mark>1.05</mark>
6. MAIN STREET (US 20) AND 22 <sup>ND</sup> AVENUE	TWSC	v/c ≤ 0.90	A/E	10/35	0.20/ 0.34	B/F	12/>100	0.32/ <mark>1.58</mark>
8. MAIN STREET (US 20) AND CLARK MILL ROAD	TWSC	v/c ≤ 0.85	A/C	9/19	0.17/ 0.16	B/F	13/>100	0.36/ <mark>3.06</mark>
10. MAIN STREET (US 20) AND 47 <sup>TH</sup> AVENUE	TWSC	v/c ≤ 0.85	A/C	9/19	0.14/ 0.16	A/F	10/>100	0.26/ <mark>1.67</mark>

A. AWSC: All Way Stop Control, TWSC: Two Way Stop Control

B. Overall intersection measures reported for signal and AWSC intersections. The worst approach for major/minor approaches is reported for TWSC intersections.

C. Values in **Bold/Highlighted** exceed mobility standards.

Note: Projects that propose changing an intersection's traffic control on ODOT's system would require additional study as part of an Intersection Control Evaluation (ICE) to be conducted before design per ODOT standards to determine the appropriate control treatment, including consideration for traffic signal warrants. In addition, it should be noted that Main Street (US 20) is an ODOT-designated reduction review route. Any proposed projects on Main Street must be planned, designed, and constructed in coordination with the Mobility Advisory Committee (MAC).

The intersection of Main Street (US 20)/Pleasant Valley Road is currently a two-way stop-controlled intersection that does not meet mobility targets under existing conditions and is projected to further degrade with additional traffic growth. Currently, this location provides access to a river crossing on the west side of Sweet Home.

The other three intersections on Main Street (US 20) (22<sup>nd</sup> Avenue, Clark Mill Road, and 47<sup>th</sup> Avenue) exist as two-way stop-controlled intersections that are not expected to meet mobility targets under future 2045 baseline conditions. These intersections would all likely serve future growth in the North Sweet Home Area (NSHA), and the timing of the improvements would likely coincide with development. The specific needs for when these locations would meet signal warrants would likely depend on the degree of development and connectivity within the NSHA. Constructing a traffic signal at these locations would increase the intersection's capacity to accommodate future volumes and growth in the NSHA.

# **VEHICLE CAPACITY IMPROVEMENT PROJECTS**

Vehicle capacity projects were identified based on expected vehicle capacity deficiencies in 2045.

#### Main Street at Pleasant Valley Road

The intersection of Main Street and Pleasant Valley Road has an existing capacity deficiency. This location is also unique as it is located on the western edge of the city and provides one of only two connections across the South Santiam River in Sweet Home (the other located at Foster Dam Road). This location may be a good candidate for either a roundabout or a new traffic signal. A roundabout would provide the following additional benefits in addition to the capacity benefits provided by a traffic signal:

- Serve as a visual gateway treatment on the west side of town
- Improve awareness of travelers entering the urban area
- Reduce vehicle speeds entering the downtown area.
- Reduce the severity of crashes by turning vehicles

A roundabout concept would also likely require additional right of way to accommodate design vehicles and freight movements along the highway. A traffic signal at this location would improve mobility, but it would not provide the other benefits that a roundabout could provide at this location. Due to its proximity to the railroad, any modification of this intersection will need to be coordinated with the rail. The addition of a roundabout near the existing rail right of way might be deemed infeasible for railroad function.

# North Sweet Home Area Connections (Main St at 24th Ave, Clark Mill Rd, and 47th Ave)

The traffic control needs for these three locations are all related and are directly tied to future growth in the North Sweet Home Area. Without additional growth in the North Sweet Home Area, future intersection control upgrades would not likely be needed. These locations are being evaluated through the concurrent NSHA planning process, and specific needs and traffic demands will evolve depending on the NSHA preferred alternatives, including land use types and locations. For purposes of this memorandum, the three projects C2, C3, and C4 are currently identified as placeholder projects to address future growth needs.

While the intersection of Main Street / 22<sup>nd</sup> Avenue is not projected to meet mobility targets, the nearby intersection of Main Street / 24<sup>th</sup> Avenue is planned to provide future connectivity to the North Sweet Home area, including an approved rail crossing. Given the proximity of the two intersections, it is assumed that only one location would be upgraded (i.e., 24<sup>th</sup> Avenue) and that local connectivity improvements could allow traffic to travel between 22<sup>nd</sup> Avenue and 24<sup>th</sup> Avenue.

Preliminary traffic signal warrants were conducted for the locations using the ODOT PSW form and the 2045 No Build traffic volumes. TPAU uses Signal Warrant 1, Condition A and Condition B (MUTCD), which deal primarily with high volumes on the intersecting minor street and high volumes on the major-street. Meeting preliminary signal warrants does not guarantee that a signal shall be installed. Before a signal can be installed, a field warrant analysis is conducted by the Region. If warrants are met, the State Traffic-Roadway Engineer will make the final decision on the installation of a signal.

The preliminary signal warrants results (using 2045 No Build traffic volumes) indicated that:

- Main Street / 22<sup>nd</sup> /24<sup>th</sup> Avenue<sup>1</sup> Preliminary signal warrant NOT met (without adjusted NSHA growth)
- Main Street / Clark Mill Road Preliminary signal warrant met (without adjusted NSHA growth)
- Main Street / 47<sup>th</sup> Avenue Preliminary signal warrant NOT met (without adjusted NSHA growth)

While two of the locations do not meet preliminary signal warrants with the 2045 No Build traffic volumes, it is important to acknowledge that the degree and location of land use development within the North Sweet Home Area (which are not fully accounted for in the 2045 No Build traffic volumes) could significantly impact the traffic demands at these locations. Ongoing planning for the NSHA will continue to refine the traffic needs at these locations based on the preferred alternative.

For system context, it is important to note the locations of these intersections relative to other existing traffic signals. On Main Street, the traffic signal that is located furthest east is at 18<sup>th</sup> Avenue. The conceptual spacing between these potential traffic signal locations under consideration includes:

• 18<sup>th</sup> Avenue to 24<sup>th</sup> Avenue – Approximately 0.45 miles

<sup>&</sup>lt;sup>1</sup> For purposes of the preliminary signal warrant, the combined southbound traffic volumes at the two intersections 22<sup>nd</sup> Avenue and 24<sup>th</sup> Avenue were combined, assuming that future east-west connectivity improvements between 22<sup>nd</sup> Avenue and 24<sup>th</sup> Avenue would provide access to the traffic signal for travelers using each intersection.

- 24<sup>th</sup> Avenue to Clark Mill Road Approximately 0.40 miles
- Clark Mill Road to 47<sup>th</sup> Avenue Approximately 1.2 miles

The identified capacity projects, including placeholders for the three NSHA locations (C2, C3, and C4) are summarized in **Table 2**.

Project ID	Project Name	Description	Cost Estimate <sup>B</sup>
C1	Main Street/Pleasant Valley Road Intersection Improvement	Construct a traffic control upgrade at Main Street (US 20)/Pleasant Valley Road. Location may be a candidate for a roundabout.	\$ 5,750,000
C2	Main Street/24 <sup>th</sup> Avenue Signal	Construct a traffic control upgrade at Main Street (US 20)/22nd Avenue. Location may be a candidate for a traffic signal.	\$ 600,000
С3	Main Street/Clark Mill Road Signal	Construct a traffic control upgrade at Main Street (US 20)/Clark Mill Road. Location may be a candidate for a traffic signal.	\$ 600,000
C4	Main Street/47th Avenue	Construct a traffic control upgrade at Main Street (US 20)/47th Avenue. Location may be a candidate for a traffic signal.	\$ 600,000
	Total		\$7,550,000

#### TABLE 2. PRELIMINARY VEHICLE CAPACITY PROJECTS<sup>A</sup>

A. Projects that propose changing an intersection's traffic control on ODOT's system would require additional study as part of an Intersection Control Evaluation (ICE) to be conducted before design per ODOT standards to determine the appropriate control treatment, including consideration for traffic signal warrants.

B. All cost estimates are based on 2022 dollars

#### ACCESS MANAGEMENT

State law (OAR 734-051) authorizes ODOT and local governments to regulate new access from state and local roads when new development is proposed. In some cases where safety is a concern, ODOT and local governments may require modifications to existing driveways or private roads. Access management refers to the application of these regulations as well as various strategies intended to maintain or improve safety and mobility along a corridor or other planning area.

Access management strategies include:

- Consolidating driveways to reduce the number of turning movements, which are potential points of conflict
- Relocating driveways to increase the spacing between them
- Providing turn lanes to allow vehicles to move out of the travel lane when turning

- Widening driveways to allow for a larger radius and higher-speed travel path into and out of the driveway
- Restricting turning movements to right-in-right-out to eliminate hazardous left-turn movements

Implementing access management strategies is complicated because property owners have certain legal rights. Public agencies may be required to compensate property owners if access is closed as part of a consolidation strategy. Small, constrained properties are especially challenging because there may not be an alternate access location.

With US 20 classified as a Regional Highway, access spacing standards vary from 250 to 500 feet within Sweet Home based on speed limit, as documented in TM3 Existing Conditions. OR 228 is classified as a District Highway, and the access spacing standard varies from 350 to 500 feet. The existing access along these segments has a lower average spacing (55 feet to 160 feet average spacing), depending on segment location. Since none of the segments meet the access spacing standard, continued opportunities for access management and consolidation should be considered as properties redevelop along both US 20 and OR 228.

#### ACTIVE TRANSPORTATION ALTERNATIVES

#### **PEDESTRIAN NEEDS**

#### Sidewalks

There are significant sidewalk gaps along many collector and arterial streets in Sweet Home (shown in **Figure 1**), including Clark Mill Road, Long Street, Mountain View Road, 47<sup>th</sup> Avenue, and 53<sup>rd</sup> Avenue.

#### **PEDESTRIAN PROJECTS**

Pedestrian projects were identified based on existing gaps in sidewalk facilities.

Table 3 lists pedestrian-focused sidewalk infill projects. Projects are mapped in Figure 5.

When deciding on the width of a sidewalk, it is important to consider the existing right of way as well as the vehicle volume for the street. Streets with higher vehicle volumes and faster speeds should consider projects with wider sidewalks to provide more buffer between the pedestrians and vehicles. In areas with constrained right of way, it should be prioritized to install sidewalks on at least one side of the street.

Some of the identified sidewalk gap needs were combined with other project elements (e.g., street modernization to add bicycle lanes and curbs) and are included in the following sections.

|--|

Project ID	Project Name	Description	Cost Estimate
A1	Clark Mill Road Sidewalk Infill	Infill existing sidewalk gaps (8,000 ft) on Clark Mill Road. Update stormwater infrastructure to current standards where necessary.	\$9,700,000
А3	Mountain View Road Sidewalk Infill	Infill existing sidewalk gaps on Mountain View Road (8,000 ft). Update stormwater infrastructure to current standards where necessary.	\$9,700,000
Α5	53rd Avenue Sidewalk Infill	Infill existing sidewalk gaps on 53rd Avenue (8,700 ft). Update stormwater infrastructure to current standards where necessary.	\$10,400,000
	Total		\$29,800,000



#### FIGURE 1. SIDEWALK CONDITIONS

#### **Bike Network Deficiencies**

To identify bicycle facility needs in Sweet Home, the bicycle level of traffic stress (bicycle LTS or BLTS) was evaluated for collector and arterial streets. Bicycle LTS is a measure used to assess the comfort and safety of bicycling conditions on different streets and routes, categorizing streets into four levels based on their traffic characteristics. For example, BLTS 1 represents very low stress conditions that are highly comfortable for cyclists, often having minimal traffic, low vehicle speeds, and dedicated bicycle facilities such as bike lanes or separated paths. BLTS 4 represents high stress conditions that are uncomfortable and potentially unsafe for bicyclists due to high traffic volumes, high vehicle speeds, and a lack of dedicated bicycle facilities.

As shown in **Figure 2**, several streets in Sweet Home maintain moderate or high-stress conditions for bicyclists, including Main Street, Long Street, Clark Mill Road, 10<sup>th</sup> Avenue, Elm Street, and 1<sup>st</sup> Avenue.





### **BICYCLE PROJECTS**

Bicycle projects were identified depending on a location's BLTS and existing bicycle facilities, emphasizing lowering BLTS to provide greater comfort for bicyclists. **Table 4** lists bicycle-focused projects. Projects are mapped in **Figure 3**.

There are three primary options for bike treatment:

- Buffered Bike Lane
- Shoulder Bike Lane
- Neighborhood Greenway/ Traffic Calming

The minimum width for a bike lane is at least 6' wide. Bike lanes on streets with higher vehicle volumes and speeds should be wider to provide more space between bikes and cars. If space allows, these facilities should also be buffered to provide added safety for the bike lane user. The trade-off to adding buffering to a bike lane is often the removal or disruption of on-street parking.

Alternatively on lower traffic streets with constrained right of way, it might be more optimal to install traffic calming treatments like lowering speed limits or adding speed humps to create a better shared space environment for all road users.

Project ID	Project Name	Description	Cost Estimate
A6	Main Street Bike Lanes	Construct 6' wide bike lanes on Main Street (US 20) west of 18th Avenue; consider buffered bike lanes on Main Street (US 20) east of 18th Avenue	\$54,350,000
A7	Holley Road Bike Lanes	Construct 6' shoulder bike lanes on Holley Road from Main Street (US 20) to the western city limits within the current right of way.	\$200,000
<b>A</b> 8	Long Street Bike Lane Infill	Add 6' shoulder bike lanes from Holley Road to 22nd. Consider buffered bike lanes with parking removal.	\$200,000
A9	Airport Road Bike Lanes	Construct 6' shoulder bike lanes on Airport Road from $43^{rd}$ to $49^{th}$ within the existing right of way.	\$150,000
A11	49th Avenue Bike Lanes	Construct 6' shoulder bike lanes on 49th Avenue from Long Street to Main Street (US 20) within the existing right of way.	\$100,000

#### TABLE 4. PRELIMINARY BICYCLE PROJECTS<sup>A</sup>

A12	53rd Avenue and Wiley Creek Drive Bike Lanes	Construct 6' shoulder bike lanes on 53rd Avenue and Wiley Creek Drive. Widen Wiley Creek Road where necessary to maintain the bike lane.	\$6,900,000
A13	18th Avenue/Ames Creek Road Bike Lanes	Construct 6' shoulder bike lanes from south city limit to Tamarack Street along 18 <sup>th</sup> and Ames Creek Rd. Install greenway treatment along 18 <sup>th</sup> north of Tamarack.	\$500,000
A14	Mountain View Road Bike Lanes	6' Construct shoulder bike lanes on Mountain View Road from Long Street to Cedar Street. Remove parking where necessary.	\$200,000
	Total		\$62,600,000
A Projec	ts aim to decrease Bike I	evel of Traffic Stress (BLTS) to a 1 or 2 A BLTS of 1 represents a lo	w stress and

A. Projects aim to decrease Bike Level of Traffic Stress (BLTS) to a 1 or 2. A BLTS of 1 represents a low stress and comfortable facility, while a BLTS of 4 is a high stress facility that may be dangerous to cyclists and only utilized by aggressive cyclists.

# **BICYCLE AND PEDESTRIAN PROJECTS**

The projects identified in **Table 5** include elements of both pedestrian and bicycle treatments.

PROJECT ID	PROJECT NAME	DESCRIPTION	COST ESTIMATE
A39	Elm Street Greenway	Designate a neighborhood greenway on Elm Street; install speed humps, signage, and striping	\$700,000
A40	Long Street Roadway Modernization	Installation of Sidewalk and 6' bike lanes east of 35th Street. Updating of drainage with sidewalk improvements. Consider lowering the speed limit and implementing Greenway treatment for bike facilities if bike lanes are infeasible	\$15,800,000
A41	47th Greenway	Designate a neighborhood greenway on 47th Street; install speed humps, signage, and striping. Infill missing sidewalk on both sides of the road. Lower speed limit to 30 MPH	\$400,000
	Total		\$16,900,000



FIGURE 3. BICYCLE AND MULTIMODAL PROJECTS

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# SAFE ROUTES TO SCHOOL

The City's adopted Safe Routes to School (SRTS) Plan<sup>2</sup> lists 23 recommended improvements near Sweet Home High School and Sweet Home Junior High School. The projects are focused on crossings and sidewalk improvements.

**Figure 4** shows a map of projects recommended by the Sweet Home SRTS Plan. **Table 6** lists the SRTS projects added to the TSP. All 23 projects are included in the TSP.



FIGURE 4. SWEET HOME SAFE ROUTES TO SCHOOL PLAN PROPOSED PROJECTS

<sup>&</sup>lt;sup>2</sup> Sweet Home Safe Routes to School Plan, City of Sweet Home. June 2022.

PROJECT ID	PROJECT NAME	DESCRIPTION	COST ESTIMATE	NOTES
A16	22nd Avenue Sidewalk	Improve sidewalks and install curb ramps along 22nd Avenue	\$5,600,000	SRTS Plan Rec #1
A17	22nd Avenue/Mountain View Road Crossings	Install striping upgrades and curb extensions at 22nd Avenue/Mountain View Road intersection	\$150,000	SRTS Plan Rec #2
A18	22nd Avenue/Ironwood Street Crossings	Install curb ramps, upgrade signage and striping, and install lighting at 22nd Avenue/Ironwood St intersection	\$264,000	SRTS Plan Rec #3
A19	22nd Avenue/Juniper Court and 22nd Avenue/Kalmia Street Crossings	Install curb ramps, upgrade striping, and install lighting at 22nd Avenue/Juniper Court and 22nd Avenue/Kalmia Street	\$289,000	SRTS Plan Rec #4
A20	22nd Avenue/Long Street Crossings	Install curb ramps, upgrade striping, and install lighting at 22nd Avenue/Long Street	\$269,000	SRTS Plan Rec #5
A21	22nd Avenue/Main Street Crossing	Upgrade striping, install RRFB, and install lighting at 22nd Avenue across Main Street (US 20)	\$299,000	SRTS Plan Rec #6 (ODOT Funded)
A22	22nd Avenue Multiuse Path	Remove parking and construct multimodal path on 22nd Avenue between Mountain View Road and Long Street	\$1,850,000	SRTS Plan Rec #7
A23	Main Street Sidewalk Enforcement	Enforce sidewalk clearance code on Main Street		SRTS Plan Rec #8
A24	Main Street Crossings	Upgrade striping on Main Street from 18th Avenue to 23rd Avenue; install curb ramps and lighting at Main Street/18th Avenue	\$269,000	SRTS Plan Rec #9
A25	18th Avenue Sidewalks	Improve sidewalks and install curb ramps on 18th Avenue between Main Street (US 20) and Ames Creek Road	\$1,950,000	SRTS Plan Rec #10
A26	High School Driveway Crossing	Install RRFB, upgrade signage and striping, and install lighting at the high school driveway on 18th Avenue	\$299,000	SRTS Plan Rec #11

A27	18th Avenue/Grape Court Crossing	Upgrade striping and install curb ramps at 18th Avenue/Grape Court	\$30,000	SRTS Plan Rec #12
A28	Mountain View Road/Ames Creek Road Crossings	Upgrade striping, install curb ramps, and install lighting at Mountain View Road/Ames Creek Road	\$269,000	SRTS Plan Rec #13
A29	Mountain View Road/Elm Street Crossing	Upgrade striping and install lighting at Mountain View Road/Elm Street	\$239,000	SRTS Plan Rec #14
A30	Mountain View Road Multiuse Path (South)	Construct a 10-foot wide shared use path and northbound shared roadway bicycle markings between Ames Creek Road and school property	\$950,000	SRTS Plan Rec #15
A31	Mountain View Road Multiuse Path (North)	Construct a 10-foot wide shared use path and curb ramps at intersections between 22nd Avenue and Long Street	\$3,400,000	SRTS Plan Rec #16
A32	Ames Creek Road Restriping	Restripe Ames Creek Road to narrow travel lanes, shift centerline, and provide more pedestrian space between Mountain View Road and Surrey Lane; explore 25 mph speed limit	\$100,000	SRTS Plan Rec #17
A33	Ames Creek Road Sidewalk	Install sidewalk on the south side of Ames Creek Road from Mountain View Road to Surrey Lane	\$950,000	SRTS Plan Rec #18
A35	Juniper Street Sidewalk	Install sidewalk on the north side of Juniper Street from Mountain View Road to Ashbrook Park	\$950,000	SRTS Plan Rec #20
A36	Juniper Street Greenway	Designate a neighborhood greenway on Juniper Street from Mountain View Road to 35th Avenue; install speed humps, signage, and striping	\$350,000	SRTS Plan Rec #21
A37	Harding Street Sidewalk	Install sidewalk on the south side of Harding Street from Mountain View Road to 27th Avenue	\$1,600,000	SRTS Plan Rec #22
A38	Kalmia Street Sidewalk	Install sidewalk on the south side of Kalmia Street from Mountain View Road to 29th Avenue	\$1,250,000	SRTS Plan Rec #23
	Total		\$15,727,000	



#### **FIGURE 5. PEDESTRIAN PROJECTS**

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#### **DOWNTOWN STREETSCAPE**

In 2022 a conceptual downtown streetscape & parking plan was developed for improvements to be made to Long Street and Main Street. The following projects are recommendations from this plan:

PROJECT ID	PROJECT NAME	PROJECT DESCRIPTION	COST ESTIMATE
P1	Long Street Sidewalk Buffer	Provide landscaping along the sidewalk edge and remove on-street parking to add a landscape buffer.	\$481,000
Ρ2	Long Street Pedestrian Island	Add a pedestrian island or curb bulb- outs to shorten crossing distance at key intersections	\$1,500,400
Р3	Long Street Parking Restriping	Revise lane striping to add parking. There are areas where narrowing the travel lanes results in additional width for on-street parking	\$81,400
Р4	Long Street Head-in parking	At locations with sufficient roadway width add head-in angle parking on one side of the roadway	\$81,400
Р5	Parking Management Policy	Implement a policy for Downtown that limits parking to 2-hours on-street and 4-hour off street. Increase level of enforcement to ensure turn over occurs.	
Р6	Long Street Modification 10 <sup>th</sup> to 18th	Maintain 11' sidewalks, 8' parking lanes and 11' travel lanes from 10 <sup>th</sup> Ave to midway between 15 <sup>th</sup> and 18 <sup>th</sup> . Include bulb-outs at the intersections	\$4,114,300
Ρ7	Main Street Modification	Addition of bulb-outs along the corridor which will provide spaces for lighting, streetscape amenities and trees. Add a median and remove pedestrian lighting from the existing median. From 9 <sup>th</sup> to 18 <sup>th</sup>	\$2,477,100
			\$8,735,600

#### TABLE 7. DOWNTOWN STREETSCAPE PROJECTS

#### TRANSIT

As noted in **Technical Memo #3**, **Existing Conditions**, transit service is provided in Sweet Home through three main routes: the Linn Shuttle, the Sweet Home Shopper, and the Dial-A-Bus Service. In the future, there may be a need for expanded transit service and improved access to transit to support areas with high projected employment growth or housing growth, such as the North Sweet Home Area (NSHA). Although there are no transit-specific projects, providing sidewalks and bike facilities leading to transit stops and installing enhanced crossings around transit stops are key improvement strategies.

#### FREIGHT ALTERNATIVES

#### **RAILROAD NEEDS**

One rail line serves Sweet Home from the west terminating at the Foster Mill site on the east side of the City. The line is operated by Albany and Eastern Railroad Company and connects Sweet Home to Albany. Within City limits, the line travels roughly parallel to Main Street (US 20) approximately one block north. The nine existing rail crossings in Sweet Home listed below require significant safety and ADA-accessibility upgrades:

- Pleasant Valley Road
- 9<sup>th</sup> Avenue
- 12<sup>th</sup> Avenue
- 18<sup>th</sup> Avenue
- Clark Mill Road

- 47<sup>th</sup> Avenue (West)
- 47<sup>th</sup> Avenue (East)
- 53<sup>rd</sup> Avenue
- 54<sup>th</sup> Avenue

The planned future extension of 24<sup>th</sup> Avenue per the North Sweet Home Area (NSHA) Plan will require a new rail crossing. The proposed crossing has received a rail crossing order and must be constructed within five years of the order.

Lastly, the existing trestle bridge crossing Main Street between 57<sup>th</sup> Avenue and 60<sup>th</sup> Avenue is damaged from vehicle crashes such that it is no longer structurally sound and requires complete replacement.

#### **RAILROAD PROJECTS**

**Table 8** lists the preliminary railroad projects which are mapped in Figure 6.

#### TABLE 8. PRELIMINARY RAILROAD PROJECTS

PROJECT ID	PROJECT NAME	PROJECT NAME DESCRIPTION							
R1	Pleasant Valley Road Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	\$600,000						

R2	9th Avenue Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	\$600,000
R3	12th Avenue Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	\$600,000
R4	18th Avenue Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	\$600,000
R5	24th Avenue Rail Crossing	Construct new railroad crossing across future extension of 24th Avenue Crossing Order No. 51372 (2021)	\$600,000
R6	Clark Mill Road Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	\$600,000
R7	47th Avenue (West) Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	\$600,000
R8	47th Avenue (East) Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	\$600,000
R9	53rd Avenue Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	\$600,000
R10	54th Avenue Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	\$600,000
R11	Main Street Railroad Bridge	Replace the damaged trestle bridge	\$20,000,000
	Total		\$26,000,000

#### SAFETY ALTERNATIVES

#### SAFETY NEEDS

A review of recent crash data identified two locations within the City that exceed the critical crash rate. One location, Main Street (US 20) and 22<sup>nd</sup> Avenue was recently reconfigured to add an enhanced pedestrian crossing. The other location, Long /18<sup>th</sup> Street is an all way stop controlled intersection.

The intersection of Long / 18<sup>th</sup> Street is located near the high school. While all approaches are required to stop at the all way stop sign, the degree of activity and distractions near the intersection approaches, including parking and utility poles, may contribute to the crash frequency. Improvements to driver focus at the intersection may reduce crash frequency.

#### SAFETY PROJECTS

Table 9 lists projects addressing safety needs in Sweet Home. Projects are mapped in Figure 6.

PROJECT ID	PROJECT NAME	DESCRIPTION	COST ESTIMATE
S1	Long/18 <sup>th</sup> intersection improvements	Monitor the intersection to determine if additional improvements are needed to reduce crash frequency. Improvements may include adding signing upgrades and potential on-street parking reductions to improve visibility and alert drivers of pedestrian activity and traffic control.	\$70,000
S2	Shea Viewpoint / Riggs Hill Road	Install safety enhancements to the eastern gateway. These may include signing, striping, lighting, and/or traffic control to decrease the speed of traffic entering urban area and allow safe pedestrian crossings.	\$200,000
S3	Long St/ Holley Rd Right in Right Out	Restrict left turn movements at the intersection to reduce vehicle conflicts that occur near Main Street. Add signage as well as barriers to prevent left turns from Long Street to OR 228 and from OR 228 to Long Street. These improvements would also improve the traffic flow from Main Street to Holley Road, making the route more attractive and decreasing traffic cutting through on 1 <sup>st</sup> Avenue to avoid the intersection.	\$400,000
S4	Main Street Reservoir Crossing	Install a pedestrian crossing near the Foster Reservoir	\$500,000
	Total		\$1,170,000

TABLE 9.	SWEET	HOME	TSP	SAFETY	PROJECTS
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FIGURE 6. RAIL, VEHICLE CAPACITY, AND SAFETY PROJECTS

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#### EMERGING TRANSPORTATION TECHNOLOGIES

Emerging transportation technologies will shape our roads, communities, and daily lives for generations. Vehicles are becoming more connected, automated, shared, and electric. Although this future is highly uncertain, it will have significant impacts on how we plan, design, build, and use our transportation system, especially along state facilities such as US 20.

#### SMART MOBILITY

Below are some important definitions that provide the basis for the impacts, policies, and action items discussed in the following sections.

- Connected vehicles (CVs) will enable communication between vehicles, infrastructure, and other road users.
- Automated vehicles (AVs) will, to varying degrees, take over driving functions and allow travelers to focus their attention on other matters. Already today, we have vehicles with combined automated functions like lane keeping and adaptive cruise control. However, these still require constant driver oversight. In the future, more sophisticated sensing and programming technology will allow vehicles to operate with little to no operator oversight.
- Shared vehicles (SVs) allow ride-hailing companies to offer customers access to vehicles through cell phone applications. Ride-hailing applications allow for on-demand transportation with comparable convenience to car ownership without the hassle of maintenance and parking. Ridehailing applications can enable customers to choose whether to share a trip with another person along their route or travel alone.
- Electric vehicles (EVs) have been on the road for decades and are becoming more economically feasible as the production costs of batteries are declining. To accommodate a future where electric vehicles will come to dominate our vehicle fleet, charging stations must be constructed in cooperation with local and regional governments and electric utilities.

Many of these vehicles will not be exclusive to the others, and it is important to consider the implications that arise from the combination of these technologies. When discussing these vehicles, they can be referred to as connected, automated, shared, and electric (CASE) vehicles.

#### PREPARING FOR SMART MOBILITY IN SWEET HOME

Because Sweet Home is located along rural US 20 between central Oregon and the I-5 corridor, the presence of electric vehicles from tourist traffic is most likely to impact Sweet Home's transportation network soon. One strategy to accommodate this impact is to add electric vehicle charging stations at key locations near recreation areas or convenient rest stops. For example, shared electric vehicle chargers at the Foster Reservoir viewpoint or in the downtown area can encourage travelers with electric vehicles to spend time in Sweet Home rather than passing through.

#### SMART MOBILITY PROJECTS

Projects focusing on smart mobility were selected based on the potential for electric vehicle presence from tourist traffic. **Table 10** shows the smart mobility project list.

#### TABLE 10. PRELIMINARY SMART MOBILITY PROJECTS

PROJECT ID	PROJECT NAME	COST ESTIMATE	
E1	EV Charging Stations	Install electric vehicle charging stations at key destinations, such as downtown and at parks	\$150,000

# LOCAL STREET CONNECTIVITY

Local street connectivity is required by the Transportation Planning Rule (OAR 660-012) and is important for Sweet Home's continued development. Providing adequate connectivity can reduce the need for wider roads, traffic signals, and turn lanes. Increased connectivity can reduce a city's overall vehicle-miles traveled, balance the traffic load on major facilities, encourage citizens to seek out other travel modes, and reduce emergency vehicle response times. While improving local street connectivity is easier to implement in newly developed areas, retrofitting existing areas to provide great connectivity should also be attempted.

The design and construction of new connecting streets must evaluate whether neighborhood traffic management strategies are necessary to protect existing neighborhoods from potential traffic impacts caused by extending stub end streets. Furthermore, to establish appropriate expectations, the City encourages signage indicating the potential for future connectivity when development constructs stub streets.

The following locations have been identified for improvement in local connectivity as adjacent areas are developed:

- North Sweet Home Area significant opportunities for local connectivity enhancements as areas are developed, including the new connection of the east-west collector roadway. These locations are being refined through the NSHA planning process.
- East-West connectivity south of Long Street As areas develop, additional connectivity to provide parallel routes to Long Street will improve circulation.
- 22<sup>nd</sup> Avenue to 24<sup>th</sup> Avenue north of Main Street Providing a future connection will allow improved access to the North Sweet Home Area and potential future traffic control upgrades at 24<sup>th</sup> Avenue / Main Street.

# TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) is the general term used to describe actions that remove single-occupant vehicle trips from the roadway network during peak travel demand periods. As growth in Sweet Home continues, the number of vehicle trips and travel demand in the area will also increase. Changing people's travel behavior and providing alternative mode choices will help accommodate this growth by reducing the need to build new or expanded roadways. Potential projects such as sidewalks, bicycle routes, and transit enhancements which support TDM are detailed as part of the active transportation and transit system project sections. However, other TDM strategies described below will be pursued as well.

- Education and Outreach Sweet Home will support the creation of education programs or community groups to help promote and encourage walking, biking, and transit use.
- Trip Reduction Strategies Sweet Home will work with larger employers (e.g., 50 employees or more) to provide incentives for reducing single-occupancy vehicle trips. For example, a vanpool between employment centers in the Albany-Lebanon area and Sweet Home residents could be explored.
- Transit Improvements Advancing transit improvements could encourage less single-occupancy vehicle use. Improvements may include increasing the frequency of existing routes, adding new routes, improving transit stop facilities, and providing first/last-mile solutions that connect transit with destinations or other accessible modes of travel.
- Supporting Travel by Walking and Biking Nearly all of Sweet Home's transportation goals can be partially addressed through the promotion of active transportation. Increasing the accessibility and comfort of travel by walking and biking in and around Sweet Home will provide mobility options for all users, support healthy living, minimize impacts to the environment, and help Sweet Home grow sustainably.
- Land Use Planning Sweet Home will encourage development that effectively mixes land uses to reduce vehicle trip generation.

#### FUNDING OPPORTUNITIES

Understanding the sources of transportation funding and the amount that may be available helps set reasonable expectations for what improvements can be made by 2045. It also informs the prioritization of projects and allows the project team to identify whether new or expanded funding sources will be needed to accomplish Sweet Home's transportation goals.

#### **CURRENT FUNDING SOURCES**

Sweet Home currently has two primary sources for transportation funding, the State Gas Tax and the Transportation System Development Charge (SDC).

#### **State Gas Tax**

The State Gas Tax is allocated to Sweet Home from the state based on the collection of State fuel taxes. The revenue can be used for a variety of transportation needs and is currently the primary source of revenue for the City's Transportation Fund (Fund 206). The fund is used to cover various transportation, maintenance, and operating expenses. Recently, the City's share of State Gas Tax has ranged between approximately \$734,000 and \$780,000 per year and is estimated in the budget to be approximately \$777,000 per year. The combined expenditures for Personal Services and Materials and Services are generally budgeted to be approximately \$740,000 per year, which limits remaining funds that can be used on capital projects.

# System Development Charges

System Development Charges (SDCs) from new developments are intended to offset the burden of development on the transportation system. The funds collected would be kept in a dedicated SDC fund, apart from the City's general-purpose street operations, maintenance, and capital improvements fund. State law restricts the use of SDC funds to capacity-adding projects, generally for constructing or improving portions of roadways impacted by applicable development. SDCs cannot be used to fund improvements for existing deficiencies. The transportation SDC is a one-time fee.

The City of Sweet Home currently charges SDCs for water, sewer, storm water, parks, and transportation. The transportation SDC rate is \$3,906 for a single-family dwelling unit. While the amount of fees collected by the City is entirely dependent on development activity, the City's budget currently estimates approximately \$120,000 per year in transportation SDC revenue.

### ADDITIONAL FUNDING SOURCE CONSIDERATIONS

New transportation funding options include local taxes, assessments and charges, and state and federal appropriations, grants, and loans. All of these resources can be constrained based on a variety of factors, including the willingness of local leadership and the electorate to entertain new fees; the availability of local funds to be dedicated or diverted to transportation issues from other competing City programs; and the availability of state and federal funds. Nonetheless, it is important for the City to consider available opportunities for enhanced funding for the transportation improvements that will be identified in the TSP as the current sources will not be sufficient to meet the identified need.

# POTENTIAL LOCAL FUNDING SOURCES

Two other local funding sources that are used by a variety of cities in Oregon include a local gas tax and street utility fee.

# Local Gas Tax

A local gas tax is separate from the State gas tax and requires voter approval. Currently over 30 cities and counties in Oregon have a local fuel tax that ranges from \$0.01 to \$0.10 per gallon. The amount of revenue collected by a potential local fuel tax would depend on the amount of fuel sold locally, and the tax rate. The Cities of Canby and Hood River each have a \$0.03 per gallon rate and collect<sup>3</sup> approximately \$400,000 annually.

#### **Street Utility Fee**

A Transportation Utility Fee (sometimes known as a Street Maintenance Fee, Road User Fee, or Street Utility Fee) is a monthly fee based on use of the transportation system that is collected from residences within city limits. The fee is collected through the City's regular utility bill. It is often designated for use in the maintenance and repair of the City's transportation system, which can

<sup>&</sup>lt;sup>3</sup> Oregon Department of Transportation : Taxable Distribution Reports : Fuels Tax : State of Oregon

then free up other funds (e.g., state fuel tax) for capital improvements. The fee may be structured as a flat fee, or vary based on the trip generation profile of the land use. The fees typically range from \$5 to \$10 per month for a single-family home. A rate of \$5 per month per single-family home, could generate approximately \$240,000 per year.

# **OTHER POTENTIAL FUNDING SOURCES**

The following section summarizes other funding sources that could be considered for specific project needs, but do not typically create a sustainable stream of annual funding for a city to consider.

# Surface Transportation Block Grant Program (STBG)

The STBG provides flexible funding that may be used by States and local agencies for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. Formerly called Surface Transportation Program (STP).

# **ODOT All Road Transportation Safety (ARTS) Funding**

ODOT All Roads Transportation Safety Program (ARTS) is used to address safety challenges on all public roads. Safety funding is distributed to each ODOT region, which collaborates with local governments to select projects that can reduce fatalities and serious injuries, regardless of whether they lie on a local road or a state highway. An application must be submitted by the local jurisdiction to obtain ARTS funding for local roads. Projects are built into the four-year STIP timeframe (the current STIP is 2024-2027). The funds must make use of ODOT-approved countermeasures directed towards decreasing fatal and serious injury crashes.

# Federal Competitive Grant and Loan Programs

The FAST Act authorizes a number of competitive grant and loan programs, the most prominent of which is the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant program, formerly known as BUILD and TIGER. Competitive grant and loan programs would require the City to complete an application that makes a compelling case for a specific project, often multi-jurisdictional. Some of these programs focus on a particular outcome or mode of transportation.

# **ODOT Statewide Transportation Improvement Program (STIP) Enhance Funding**

ODOT has modified the process for selecting projects that receive STIP funding to allow local agencies to receive funding for projects off the state system. Projects that enhance system connectivity and improve multi-modal travel options are the focus. The updated TSP prepares the City to apply for STIP funding.

# Safe Routes to School

The Oregon Safe Routes to School (SRTS) Program has money allocated for projects that improve connectivity for children to walk, bike and roll to and from school. Potential grant funds are distributed as a reimbursement program through an open and competitive process. Funding is available through this program for pedestrian and bicycle infrastructure projects within two miles of

schools. These funds should be pursued to implement key pedestrian and bicycle projects identified through the SRTS process.

### **Debt Financing**

While not a direct funding source, debt financing can be used to mitigate the immediate impacts of significant capital improvement projects and spread costs over the useful life of a project. This has been successful recently in Oregon communities such as Bend and McMinnville, where general obligation (GO) bond measures were passed. Key to the measures' success was that the increased property taxes were earmarked toward a defined set of projects with strong public support.

Though interest costs are incurred, the use of debt financing can serve not only as a practical means of funding major improvements, but is also viewed as an equitable funding strategy, spreading the burden of repayment over existing and future customers who will benefit from the projects. The obvious caution in relying on debt service is that a funding source must still be identified to fulfill annual repayment obligations.

The Oregon Transportation Infrastructure Bank (OTIB) is a potential source for cities to borrow funds for transportation improvement projects. The OTIB is a statewide revolving loan fund. Projects eligible to receive funding include roadway improvements, bicycle and pedestrian access, and transit capital projects.

# **Oregon Community Paths (OCP) Program**

The OCP grant program is dedicated to helping communities create and maintain connections through multiuse paths. The Oregon Department of Transportation will use monies from the state Multimodal Active Transportation fund and federal Transportation Alternatives Program fund for this program. OCP will fund grants for project development, construction, reconstruction, major resurfacing, or other improvements of multiuse paths that improve access and safety for people walking and bicycling.

### FINANCIAL CONSTRAINT CONSIDERATIONS

Based on existing revenue sources of the state gas tax and local transportation SDC, Sweet Home is estimated to have approximately \$3.1 million available for transportation improvements over the 20-year planning horizon. While consideration for new funding sources could increase this amount, it is still short of the total cost of all identified transportation needs. **Table 11** summarizes the estimated project costs for all projects identified in the previous sections, which total approximately \$175 million. The TSP will include all projects as part of the comprehensive transportation needs but will also identify a preferred project list that is reasonably likely to be funded within the estimated revenue streams, as will be documented in **Tech Memo 9 Preferred Alternatives**.

### TABLE 11. PRELIMINARY TRANSPORTATION PROJECTS BY CATEGORY

PROJECT CATEGORY	TOTAL COST
Vehicle Capacity	\$7,550,000
Pedestrian	\$29,800,000
Bicycle	\$62,600,000
Bicycle and Pedestrian	\$16,900,000
Safe Routes to School	\$15,727,000
Downtown Streetscape	\$8,735,600
Rail	\$26,000,000
Safety	\$1,170,000
Smart Mobility	\$150,000
TOTAL	\$168,632,600

**DKS** SWEET HOME TSP • TECHNICAL MEMO #6 • JANUARY 2025

# ATTACHMENTS

# CONTENTS

Attachment A: Project Evaluation Summary Attachment B: Preliminary Signal Warrant Worksheets Attachment C: Rail Crossing Order

# ATTACHMENT A: PROJECT EVALUATION SUMMARY

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Swee Futur	t Home TSP e Project Lis	Update st		Evaluation Criteria											
				Go Mol Acces Conne	al 1 bility, sibility, ectivity	Go Sa	al 2 fety	Go Qualit	oal 3 y of Life	Go Eco Deve	oal 4 nomic lopment	G System M and Ma	oal 5 Management aintenance	Total Points	Rank
Project ID	Category	Project Name	Description	Goal 1 #1	Goal 1 #2	Goal 2 #1	Goal 2 #2	Goal 3 #1	Goal 3 #2	Goal 4 #1	L Goal 4 #2	Goal 5 #	1 Goal 5 #2		
C1	Vehicle Capacity	Main Street/Pleasant Valley Roa Roundabout	Id Construct a roundabout at Main Street (US 20)/Pleasant Valley Road	5	3	5	0	4	1	5	5	5	5	38	17
C2	Vehicle Capacity	Main Street/22nd Avenue Signa	l Construct a traffic signal at Main Street (US 20)/22nd Avenue	5	4	4	5	4	4	5	5	3	5	44	1
С3	Vehicle Capacity	Main Street/Clark Mill Road Signal	Construct a traffic signal at Main Street (US 20)/Clark Mill Road	5	4	4	0	4	4	5	5	5	5	41	5
C4	Vehicle Capacity	Main Street/47th Avenue	Construct a traffic signal at Main Street (US 20)/47th Avenue	5	4	4	0	4	4	5	5	5	5	41	5
A1	Ped	Clark Mill Road Sidewalk Infill	Infill existing sidewalk gaps on Clark Mill Road	5	5	5	0	5	5	5	1	4	4	39	12
A2	Ped	Long Street Sidewalk Infill	Infill existing sidewalk gaps on Long Street	5	5	5	0	5	5	3	5	5	4	42	4
A3	Ped	Mountain View Road Sidewalk Infill	Infill existing sidewalk gaps on Mountain View Road	5	5	5	0	5	5	5	1	4	4	39	12
A4	Ped	47th Avenue Sidewalk Infill	Infill existing sidewalk gaps on 47th Avenue	5	5	5	0	5	5	5	5	5	4	44	1
Α5	Ped	53rd Avenue Sidewalk Infill	Infill existing sidewalk gaps on 53rd Avenue	5	5	5	0	5	5	5	1	4	4	39	12
A6	Bike	Main Street Bike Lanes	Construct bike lanes on Main Street (US 20) east of 18th Avenue; consider buffered bike lanes on Main Street (US 20) west of 18th Avenue	1	5	5	0	5	5	5	5	5	4	40	7
A7	Bike	Holley Road Bike Lanes	Construct bike lanes on Holley Road	1	5	5	0	5	5	5	5	5	4	40	7
A8	Bike	Long Street Bike Lane Infill	Infill gaps in bike lanes on Long Street	5	5	5	0	5	5	5	5	5	4	44	1
A9	Bike	Airport Road Bike Lanes	Construct bike lanes on Airport Road	1	5	5	0	5	5	5	5	5	4	40	7
A10	Bike	47th Avenue Bike Lanes	Construct bike lanes on 47th Avenue	1	5	5	0	5	5	5	5	5	4	40	7
A11	Bike	49th Avenue Bike Lanes	Construct bike lanes on 49th Avenue	1	5	5	0	5	5	5	1	4	4	35	23
A12	Bike	53rd Avenue and Wiley Creek Drive Bike Lanes	Construct bike lanes on 53rd Avenue and Wiley Creek Drive	1	5	5	0	5	5	5	1	4	4	35	23

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ID	Category	Project Name	Description	Goal 1 #	1 Goal 1 1 #2	Goal 2 #1	Goal 2 #2	Goal 3 #1	Goal 3 #2	Goal 4 #1	Goal 4 #2	Goal 5 #	1 Goal 5 #2		
A13	Bike	18th Avenue/Ames Creek Road Bike Lanes	Construct bike lanes on 18th Avenue and Ames Creek Road	1	5	5	0	5	5	5	1	4	4	35	23
A14	Bike	Mountain View Road Bike Lanes	Construct bike lanes on Mountain View Road	1	5	5	0	5	5	5	1	4	4	35	23
A15	Bike	Elm Street Bike Lanes	Construct bike lanes on Elm Street	1	5	5	0	5	5	5	1	4	4	35	23
A16	Ped	22nd Avenue Sidewalk	Improve sidewalks and install curb ramps along 22nd Avenue	1	5	5	0	5	5	5	1	3	4	34	31
A17	Ped	22nd Avenue/Mountain View Road Crossings	Install striping upgrades and curb extensions at 22nd Avenue/Mountain View Road intersection	1	5	5	0	5	5	5	1	4	3	34	31
A18	Ped	22nd Avenue/Ironwood Street Crossings	Install curb ramps, upgrade signage and striping, and install lighting at 22nd Avenue/Ironwood St intersection	1	5	5	0	5	5	5	1	3	3	33	42
A19	Ped	22nd Avenue/Juniper Court and 22nd Avenue/Kalmia Street Crossings	Install curb ramps, upgrade striping, and install lighting at 22nd Avenue/Juniper Court and 22nd Avenue/Kalmia Street	1	5	5	0	5	5	5	1	3	3	33	42
A20	Ped	22nd Avenue/Long Street Crossings	Install curb ramps, upgrade striping, and install lighting at 22nd Avenue/Long Street	1	5	5	0	5	5	5	1	3	3	33	42
A21	Ped	22nd Avenue/Main Street Crossing	Upgrade striping, install RRFB, and install lighting at 22nd Avenue across Main Street (US 20)	1	5	5	0	5	5	5	5	3	3	37	18
A22	Ped/Bike	22nd Avenue Multiuse Path	Remove parking and construct multimodal path on 22nd Avenue between Mountain View Road and Long Street	1	5	5	0	5	3	5	3	3	4	34	31
A23	Ped	Main Street Sidewalk Enforcement	Enforce sidewalk clearance code on Main Street	1	5	5	0	5	5	5	5	5	4	40	7
A24	Ped	Main Street Crossings	Upgrade striping on Main Street from 18th Avenue to 23rd Avenue; install curb ramps and lighting at Main Street/18th Avenue	1	5	5	0	5	5	5	5	5	3	39	12
A25	Ped	18th Avenue Sidewalks	Improve sidewalks and install curb ramps on 18th Avenue between Main Street (US 20) and Ames Creek Road	1	5	5	0	5	5	5	3	4	3	36	20
A26	Ped	High School Driveway Crossing	Install RRFB, upgrade signage and striping, and install lighting at the high school driveway on 18th Avenue	1	5	5	0	5	5	5	1	4	3	34	31
A27	Ped	18th Avenue/Grape Court Crossing	Upgrade striping and install curb ramps at 18th Avenue/Grape Court	1	5	5	0	5	5	5	1	4	3	34	31
A28	Ped	Mountain View Road/Ames Cree Road Crossings	k Upgrade striping, install curb ramps, and install lighting at Mountain View Road/Ames Creek Road	1	5	5	0	5	5	5	1	4	3	34	31

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Project ID	Category	Project Name	Description	Goal 1 #	1 Goal 1 1 #2	Goal 2 #1	Goal 2 #2	Goal 3 #1	Goal 3 #2	Goal 4 #1	Goal 4 #2	Goal 5 #:	1 Goal 5 #2		
A29	Ped	Mountain View Road/Elm Street Crossing	Upgrade striping and install lighting at Mountain View Road/Elm Street	1	5	5	0	5	5	5	1	4	3	34	31
A30	Ped	Mountain View Road Multiuse Path (South)	Construct a 10-foot wide shared use path and northbound shared roadway bicycle markings between Ames Creek Road and school property	1	5	5	0	5	4	5	1	4	5	35	23
A31	Ped	Mountain View Road Multiuse Path (North)	Construct a 10-foot wide shared use path and curb ramps at intersections between 22nd Avenue and Long Street	1	5	5	0	5	4	5	3	4	5	37	18
A32	Ped	Ames Creek Road Restriping	Restripe Ames Creek Road to narrow travel lanes, shift centerline, and provide more pedestrian space between Mountain View Road and Surrey Lane; explore 25 mph speed limit	1	5	5	0	5	4	5	1	4	4	34	31
A33	Ped	Ames Creek Road Sidewalk	Install 6-foot wide sidewalk on the south side of Ames Creek Road from Mountain View Road to Surrey Lane	1	5	5	0	5	5	5	1	4	4	35	23
A34	Ped	Elm Street Greenway	Designate a neighborhood greenway on Elm Street from 5th Avenue to Mountain View Road; install speed humps, signage, and striping	1	5	5	0	5	5	5	1	4	4	35	23
A35	Ped	Juniper Street Sidewalk	Install 6-foot wide sidewalk on the north side of Juniper Street from Mountain View Road to Ashbrook Park	1	5	5	0	5	5	5	1	3	4	34	31
A36	Ped	Juniper Street Greenway	Designate a neighborhood greenway on Juniper Street from Mountain View Road to 35th Avenue; install speed humps, signage, and striping	1	5	3	0	5	5	5	1	3	4	32	45
A37	Ped	Harding Street Sidewalk	Install sidewalk on the south side of Harding Street from Mountain View Road to 27th Avenue	1	5	5	0	5	5	5	1	3	4	34	31
A38	Ped	Kalmia Street Sidewalk	Install sidewalk on the south side of Kalmia Street from Mountain View Road to 29th Avenue	1	5	5	0	5	5	5	1	3	4	34	31
R1	Rail	Pleasant Valley Road Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	1	3	5	0	5	5	3	1	4	5	32	45
R2	Rail	9th Avenue Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	1	3	5	0	5	5	3	1	2	5	30	51
R3	Rail	12th Avenue Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	1	3	5	0	5	5	3	1	2	5	30	51
R4	Rail	18th Avenue Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	1	3	5	0	5	5	3	1	4	5	32	45
R5	Rail	24th Avenue Rail Crossing	Construct new railroad crossing across future extension of 24th Avenue	1	1	5	0	1	5	3	1	2	5	24	54
R6	Rail	Clark Mill Road Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	1	3	5	0	5	5	3	1	4	5	32	45

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Project ID	Category	Project Name	Description	Goal 1 #	1 Goal 1 1 #2	Goal 2 #1	Goal 2 #2	Goal 3 #1	. Goal 3 #2	Goal 4 #1	Goal 4 #2	Goal 5 #1	Goal 5 #2		
R7	Rail	47th Avenue (West) Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	1	3	5	0	5	5	3	5	4	5	36	20
R8	Rail	47th Avenue (East) Rail Crossin	Upgrade signing and striping, install railroad crossing gates, and g install ADA-accessible improvements to align with current railroad safety guidelines	1	3	5	0	5	5	3	5	4	5	36	20
R9	Rail	53rd Avenue Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	1	3	5	0	5	5	3	1	4	5	32	45
R10	Rail	54th Avenue Rail Crossing	Upgrade signing and striping, install railroad crossing gates, and install ADA-accessible improvements to align with current railroad safety guidelines	1	3	5	0	5	5	3	1	2	5	30	51
R11	Rail	Main Street Railroad Bridge	Replace damaged trestle bridge	1	0	1	0	1	5	1	5	1	5	20	55
S1	Safety	Main Street Reservoir Crossing	Install a pedestrian crossing near the Foster Reservoir	1	5	5	0	5	5	5	5	4	4	39	12
E1	Smart Mobility	EV Charging Stations	Install electric vehicle charging stations at key locations along Main Street	3	1	1	0	1	5	5	5	5	5	31	50

# ATTACHMENT B: PRELIMINARY SIGNAL WARRANT WORKSHEETS

**DKS** SWEET HOME TSP • TECHNICAL MEMO #6 • JANUARY 2025

Oregon Department of Transportation													
Transportation Development Branch													
Transportation Planning Analysis Unit													
	Prelimina	ry Traffic Sig	<mark>gnal Warran</mark>	t Analysis <sup>*</sup>									
Major Street: Main StreetMinor Street: 22nd Ave													
Project:	TSP		City/County:	Sweet Home									
Year:2045Alternative:No Build													
Preliminary Signal Warrant Volumes													
Num	ber of	ADT on n	najor street	ADT on minor	r street, highest								
Approa	ich lanes	approach	ning from	appro	aching								
		both di	rections	vol	ume								
Major	Minor	Percent of stan	dard warrants	Percent of stand	dard warrants								
Street	Street	100	70	100	70								
	Case	A: Minimum	<mark>ı Vehicular T</mark>	raffic									
1	1	8850	6200	2650	1850								
2 or more	1	10600	7400	2650	1850								
2 or more	2 or more	10600	7400	3550	2500								
1	2 or more	8850	6200	3550	2500								
	Case B: ]	Interruption	of Continuou	us Traffic									
1	1	13300	9300	1350	950								
2 or more	1	15900	11100	1350	950								
2 or more	2 or more	15900	11100	1750	1250								
1	2 or more	13300	9300	1750	1250								
Χ	100 percent of	standard warran	its										
	70 percent of	standard warran	its <sup>2</sup>										
	Prelimi	nary Signal '	Warrant Cal	culation									
	Street	Number of	Warrant	Approach	Warrant Met								
		Lanes	Volumes	Volumes									
Case	Major	2 or more	10600	21050	NT								
А	Minor	1	2650	499									
Case	Major	2 or more	15900	21050	NI								
В	Minor	1	1350	499									
Analyst and Da	ate:		Reviewer and I	Date:									

<sup>1</sup> Meeting preliminary signal warrants does **not** guarantee that a signal will be installed. When preliminary signal warrants are met, project analysts need to coordinate with Region Traffic to initiate the traffic signal engineering investigation as outlined in the Traffic Manual. Before a signal can be installed, the engineering investigation must be conducted or reviewed by the Region Traffic Manager who will forward signal recommendations to headquarters. Traffic signal warrants must be met and the State Traffic Engineer's approval obtained before a traffic signal can be installed on a state highway.

 $^2$  Used due to 85th percentile speed in excess of 40 mph or isolated community with population of less than 10,000.

Analysis Procedures Manual

Oregon Department of Transportation									
Transportation Development Branch									
Transportation Planning Analysis Unit									
Preliminary Traffic Signal Warrant Analysis <sup>1</sup>									
Major Street:	Main Street		Minor Street:	47th					
Project: TSP			City/County:	Sweet Home					
Year:	2045		Alternative:	No Build					
Preliminary Signal Warrant Volumes									
Number of		ADT on major street		ADT on minor street, highest					
Approach lanes		approaching from		approaching					
		both directions		volume					
Major	Minor	Percent of stan	dard warrants	Percent of stand	dard warrants				
Street	Street	100	70	100	70				
Case A: Minimum Vehicular Traffic									
1	1	8850	6200	2650	1850				
2 or more	1	10600	7400	2650	1850				
2 or more	2 or more	10600	7400	3550	2500				
1	2 or more	8850	6200	3550	2500				
Case B: Interruption of Continuous Traffic									
1	1	13300	9300	1350	950				
2 or more	1	15900	11100	1350	950				
2 or more	2 or more	15900	11100	1750	1250				
1	2 or more	13300	9300	1750	1250				
X	100 percent of standard warrants								
	70 percent of standard warrants <sup>2</sup>								
Preliminary Signal Warrant Calculation									
	Street	Number of	Warrant	Approach	Warrant Met				
		Lanes	Volumes	Volumes					
Case	Major	2 or more	10600	12250	N				
А	Minor	1	2650	1277					
Case	Major	2 or more	15900	12250	NT				
В	Minor	1	1350	1277					
Analyst and Date:			Reviewer and I	Date:	-				

<sup>1</sup> Meeting preliminary signal warrants does **not** guarantee that a signal will be installed. When preliminary signal warrants are met, project analysts need to coordinate with Region Traffic to initiate the traffic signal engineering investigation as outlined in the Traffic Manual. Before a signal can be installed, the engineering investigation must be conducted or reviewed by the Region Traffic Manager who will forward signal recommendations to headquarters. Traffic signal warrants must be met and the State Traffic Engineer's approval obtained before a traffic signal can be installed on a state highway.

 $^2$  Used due to 85th percentile speed in excess of 40 mph or isolated community with population of less than 10,000.

Analysis Procedures Manual

Oregon Department of Transportation								
Transportation Development Branch								
Transportation Planning Analysis Unit								
Preliminary Traffic Signal Warrant Analysis <sup>1</sup>								
<b>Major Street:</b>	Main Street		Minor Street:	Clark Mill Rd				
Project: TSP			City/County:	Sweet Home				
<b>Year:</b> 2045		Alternative:	No Build					
Preliminary Signal Warrant Volumes								
Number of		ADT on major street		ADT on minor street, highest				
Approach lanes		approaching from		approaching				
		both directions		volume				
Major	Minor	Percent of stan	dard warrants	Percent of stan	dard warrants			
Street	Street	100	70	100	70			
Case A: Minimum Vehicular Traffic								
1	1	8850	6200	2650	1850			
2 or more	1	10600	7400	2650	1850			
2 or more	2 or more	10600	7400	3550	2500			
1	2 or more	8850	6200	3550	2500			
Case B: Interruption of Continuous Traffic								
1	1	13300	9300	1350	950			
2 or more	1	15900	11100	1350	950			
2 or more	2 or more	15900	11100	1750	1250			
1	2 or more	13300	9300	1750	1250			
Χ	X 100 percent of standard warrants							
70 percent of standard warrants <sup>2</sup>								
Preliminary Signal Warrant Calculation								
	Street	Number of	Warrant	Approach	Warrant Met			
		Lanes	Volumes	Volumes				
Case	Major	2 or more	10600	20700	NT			
А	Minor	1	2650	1529				
Case	Major	2 or more	15900	20700				
В	Minor	1	1350	1529	<u> </u>			
Analyst and Date:			Reviewer and I	Date:				

<sup>1</sup> Meeting preliminary signal warrants does **not** guarantee that a signal will be installed. When preliminary signal warrants are met, project analysts need to coordinate with Region Traffic to initiate the traffic signal engineering investigation as outlined in the Traffic Manual. Before a signal can be installed, the engineering investigation must be conducted or reviewed by the Region Traffic Manager who will forward signal recommendations to headquarters. Traffic signal warrants must be met and the State Traffic Engineer's approval obtained before a traffic signal can be installed on a state highway.

 $^2$  Used due to 85th percentile speed in excess of 40 mph or isolated community with population of less than 10,000.

Analysis Procedures Manual

# ATTACHMENT C: RAIL CROSSING ORDER

**DKS** SWEET HOME TSP • TECHNICAL MEMO #6 • JANUARY 2025

ORDER NO. 51372 ODOT CROSSING NO. 3S-029.33 U.S. DOT NO. 938945S

# **BEFORE THE OREGON DEPARTMENT**

#### OF TRANSPORTATION

#### RX 1940

)

)

RX 1940: In the Matter of Constructing a New Railroad-Highway Grade Crossing at 24th Avenue and the Albany & Eastern Railroad Company (AERC), Sweet Home Branch in the City of Sweet Home, Linn County, Oregon.

) FINAL ORDER

Pursuant to ORS 824.202, the Oregon Department of Transportation, Commerce and Compliance Division (Department) has authority over the construction, alteration and protection of railroad-highway crossings in the State of Oregon. On 8<sup>th</sup> of April, 2021, the City of Sweet Home (City) made application under ORS 824.204 and ORS 824.206 seeking authority to construct the subject railroad-highway grade crossing (hereafter "crossing"). The affected railroad is the Albany & Eastern Railroad (AERC). The affected public authority in interest is the City of Sweet Home (City).

The Appendix to this Order depicts the scope of the proposed crossing project. The average daily traffic (ADT) volume at the new crossing is estimated to be  $\approx$ 1400 vehicles. The posted speed of vehicles is 25 miles per hour (mph). The roadway intersects the track at an angle of  $\approx$ 82 degrees. There is a daily average of 1 freight train and 1 passenger trains over the crossing. The maximum authorized speed on this track is 20 mph.

Applicant proposes to construct a new grade crossing, No. 3S-029.33. The new crossing will provide access to the Linn County property on the north for economic development and to the City owned park property alongside the Santiam River. Applicant proposes that the crossing be equipped with gates and lights, cantilevers for additional flashing lights, and pedestrian gates for sidewalks. Roadway will be four lanes with medians and bike lanes.

From the foregoing, the Department finds the proposed grade crossing is required by the public safety, public convenience and general welfare.

### IT IS THEREFORE ORDERED that:

- 1. Construction of crossing No. 3S-029.33 shall be substantially in progress within **five years** from the entered date of the Final Order. Otherwise, the authority expires on that date. No authority to establish a Quiet Zone is granted by this Final Order.
- 2. The new grade crossing shall not be opened to public use until the ordered automatic signals and circuitry are installed and operational.
- 3. Applicant (City) shall:
  - a. Construct and maintain that portion of the crossing lying outside lines drawn perpendicular to the end of ties to accommodate the roadway configuration and sidewalks depicted in the Appendix to this Order, and bear all the costs. The roadway approaches shall comply with OAR 741-120-0020 (1), (2), (3), and (4), and the sidewalks shall comply with OAR 741-120-0025 (1), (2), and (3).
  - b. Furnish, install, and maintain two guardrails adjacent to the ordered automatic signals at the crossing, as depicted in the Appendix to this Order, and bear all the costs. Guardrails shall be installed according to ODOT Standard Drawing No. RD 445, and located according to OAR 741-110-0040 (6).
  - c. Furnish, install, and maintain standard curb according to OAR 741-110-0030 (7) adjacent to the ordered automatic signals at the crossing, and bear all the costs. Curb shall commence not less than 10 feet from the centerline of nearest track and extend at full height not less than 50 feet in advance of the automatic signals.
  - d. Furnish, install, and maintain four tactile warning strips on the sidewalk approaches to the crossing, and bear all the costs. The tactile strips shall have a minimum width of two feet and be placed a minimum of 12 feet 8 inches from the nearest rail per ODOT Standard Drawing No. RD 759, and as depicted in the Appendix to this Order.
  - e. Furnish, install, and maintain two stop clearance lines at the crossing according to OAR 741-110-0030 (2) (b), and bear all the costs. Locate the devices as depicted in the Appendix to this Order, and in accordance with OAR 741-110-0040 (3).
  - f. Furnish, install, and maintain four advance warning pavement markings as depicted in the Appendix to this Order, and in accordance with OAR 741-110-0040 (4).
  - g. Furnish, install, and maintain two grade crossing advance warning (W10-1) signs. Locate the devices as depicted in the Appendix to this Order, and in accordance with OAR 741-110-0040 (4).
  - h. Furnish, install, and maintain a dynamic envelope pavement markings as depicted in the Appendix to this Order.

# ORDER NO. 51372

- i. Furnish, install and maintain 172 lineal feet of non-traversable 6 inch raised median and a minimum of 200 lineal feet of non-traversable 6 inch raised median as depicted in the Appendix to this Order.
- j. Furnish, install, and maintain two bicycle advance warning pavement markings as depicted in the Appendix to this Order.
- k. Furnish, install, and maintain two bicycle severe angle warning (OBW8-19L) signs as depicted in the Appendix to this Order.
- I. Furnish and install two skewed crossing advance warning (W10-12) signs. Locate the devices as depicted in the Appendix to this Order, and in accordance with OAR 741-110-0040 (4).
- m. Bear all the cost of work items ordered in paragraphs 4 a, b, and c below.
- 4. Railroad (AERC) shall:
  - a. Subject to reimbursement by applicant, construct that portion of the crossing lying between lines drawn perpendicular to the end of ties to accommodate the roadway configuration and sidewalks depicted in the Appendix to this Order. The roadway shall comply with OAR 741-120-0020 (1), (2), (3), and (4), and the sidewalks shall comply with OAR 741-120-0025 (1), (2), and (3).
  - b. Subject to reimbursement by Applicant, furnish and install two flashing light cantilevered signals and two automatic gates at the crossing according to OAR 741-110-0030 (3) (a) and OAR 741-110-0030 (3) (d), respectively. Locate the devices as depicted in the Appendix to this Order.
  - c. Subject to reimbursement by Applicant, furnish and install four pedestrian gates. Locate the devices as depicted in the Appendix to this Order.
  - d. Maintain the ordered items in paragraphs 4 a, b, & c, and bear all the costs.
  - e. Notify the Department in writing not less than five working days prior to the date that the ordered automatic signals will be activated and placed in service.
- 5. Each party shall notify the Department in writing upon completion of its portion of the project.
- 6. All previous Orders of the Public Utility Commission or the Department relating to the subject crossing, not in conflict with this Order, remain in full effect.

Made, entered, and effective

**ORDER NO. 51372** 

Amy Ramsdell

Commerce and Compliance Administrator

### **RIGHT TO APPEAL**

Parties to this Order have the right to appeal this Order to the Oregon Court of Appeals pursuant to OAR 183.482. To appeal you must file a petition for judicial review with the Court of Appeals within 60 days from the day this Order was served on you. The date of service is the day this Order was mailed. If you do not file a petition for judicial review within the 60-day time period, you will lose your right to appeal.



Future sidewalk thkn. (4" min.)









DATE:	August 07, 2024
TO:	Garth Appanaitis, DKS
FROM:	Tyler Bump and James Kim, ECOnorthwest
SUBJECT:	Task 4.3 NSHA Economic Redevelopment Analysis

# Introduction

The City of Sweet Home is in the process of updating its Transportation System Plan (TSP). As a component of the update, the City is also creating a refinement plan for the North Sweet Home Area (NHSA). The area north of Albany and Eastern Railroad includes over 500 acres of undeveloped land, including natural amenities and resources. The NHSA is largely zoned for Recreational Commercial, which is intended for businesses that cater to tourists and recreational activities. The area also includes some existing residential and industrial uses.

The NSHA project includes a planning component that focuses on identifying and evaluating land use alternatives and zoning options to enable redevelopment opportunities and market-supported uses in the NSHA. To that end, ECOnorthwest conducted a high-level analysis of the types of economic redevelopment activity that could occur. ECOnorthwest reviewed its previous work for the City's 2017 Economic Opportunities Analysis (EOA) and provided an updated economic analysis (Task 3.3 of this project) to identify key areas of economic opportunity and land use alternatives for further evaluation. This memo summarizes the findings of a high-level market analysis for three development options the City of Sweet Home is interested in learning more about.

# **Development Options**

An economic goal of the NSHA plan is to create new employment opportunities and attract more visitors who shop, stay, and dine at new and existing businesses. To that end, the City of Sweet Home expressed an interest in exploring the feasibility of three potential uses in the NSHA:

- Active commercial use on the former Willamette Industries Mill site ("Old Mill Site")
- Lodging and recreation for uses that could include short-term stays, long-term stays, RV parking, or camping
- Industrial use on a large lot on the rail line

Each development option poses advantages and disadvantages that are summarized below.



# **Economic Opportunities and Limitations**

# **Active Commercial**

The Old Mill Site, located at the southwest end of the NSHA, could be the centerpiece of future developments in the NSHA. Sweet Home Real Estate Restoration, the site's owner, desires to create an events center with additional commercial uses.

### **Opportunities**

**Access:** Within the NSHA, the site is the closest point to city's downtown. Existing roads (18<sup>th</sup> Ave. and Tamarack St.) and potential improvements at the nearby railroad crossing support future access to the site.

**Use:** New spaces for events, dining, and/or shopping can complement other activities in the city, so the new use is likely to feel more integrated with the community.

# Limitations

**Environmental Remediation:** The former mill site may have some undiscovered contaminants in the ground. Future property developer will need to investigate any potential contaminants and associated risks. Environmental remediation can be costly and time-consuming.

**Visibility:** The site is a block removed from Main St. and on the other side of a rail corridor, lacking exposure to new customers.

# Lodging and Recreation

New lodging spaces and intentionally designed recreational areas can attract more visitors to Sweet Home.

### **Opportunities**

**City Events:** Annual events that draw in visitors from outside the region create demand for lodging, some of which is currently met in places like Lebanon.

**Natural Amenities:** Sweet Home's location in the Cascades make it an attractive location for people seeking natural amenities. The NSHA also is located on the South Santiam River, which can provide both views and recreational activities.

### Limitations

Lack of Other Amenities and Services: Visitors looking to stay in or near Sweet Home may look for other amenities and services that are co-located. Visitors may want seamless access to electricity and internet; well-lit and regularly maintained restrooms, showers, and dump stations; or daily rentals for camping and watersports equipment. They may also look for nearby options for dining, relaxing, and recreating.



# Industrial

New opportunities in manufacturing could be explored to align with Sweet Home's history in sawmills and logging operations.

# **Opportunities**

**Access:** The NSHA is located on a rail line as well as U.S. Route 20, which connects Interstate 5 to Central Oregon.

**Water:** Sweet Home has an abundant water and wastewater capacity, which can be a key factor for a prospective industrial business. Sweet Home can further explore available water infrastructure and the need and benefits of potential investments.

# Limitations

**Competition:** There are many locations closer to Interstate 5 that have better access to markets for employees and customers.

**Environmental Contamination:** Depending on the type of industrial activity, there may be risks of new contamination, which Sweet Home can investigate.

**Rail Uncertainty:** The rail line is likely to need some improvements before it can be used effectively. Moreover, even if the rail line is fully functional, it is uncertain whether businesses will see it as an advantage relative to the lower cost of trucking.

# Market Opportunities and Limitations

# **Commercial, Lodging, and Recreation**

While there are good reasons to visit Sweet Home, people are not likely to spend much while visiting, as shown in the travel spending data.

# Opportunities

**Demand:** Services for visitors is one of the target industries identified for Sweet Home. People want to visit Sweet Home because (a) it is surrounded by nature and tourist attractions and (b) because it is relatively easy to get to (via U.S. Route 20).

# Limitations

**Travel Spending:** Visitors spend less in the Willamette Valley region<sup>1</sup> than elsewhere in the state. Overnight spending is even lower in Linn County, which is a subregion of the Willamette Valley region.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Dean Runyan Associates, The Economic Impact of Travel in Oregon, May 2023.



<sup>&</sup>lt;sup>1</sup> Does not include Portland metropolitan area.

**Employment:** Jobs in leisure and hospitality are strong (15 percent of total employment in 2021 vs. 10 percent statewide) and grew 21 percent between 2014-2021.<sup>3</sup>

**Oregon Jamboree:** This annual summer country music festival draws in visitors from across the country and even internationally. Foot traffic at gas stations and fast-food restaurants triple during the event. <sup>4</sup> The Oregon Jamboree also hosts Music & Brews in May. New lodging, restaurants, and retail could be complementary.

**Retail Supply:** Vacancies in retail spaces are below 1 percent (vs. about 3 percent in the state). Rent growth is above its ten-year average.<sup>5</sup> There could be an opportunity to introduce niche retail that features local artisans or promote agricultural, cultural, or historical tourism.

# "The Little Town That Did" – Chemainus, British Columbia

The closure of a sawmill in 1983 devastated the local economy in Chemainus, a small town on Vancouver Island, British Columbia. But it revived itself as a tourist destination, hosting events like the Festival of Murals Society since 1987 and the Theater Festival since 1993. Strategic long-term planning efforts transformed the resource-based economy into a successful community-based tourist industry.<sup>6,7</sup>

<sup>&</sup>lt;sup>7</sup> Richard Giele and Rachel Huber. "The Evolution of Chemainus, British Columbia: The Importance of Community-Driven Planning in Tourism Development." Malaspina University-College, 2007.



<sup>&</sup>lt;sup>3</sup> ECOnorthwest analysis of Oregon Employment Department data.

<sup>&</sup>lt;sup>4</sup> ECOnorthwest analysis of data from Placer.ai, which provide foot traffic insights using smartphone data.

<sup>&</sup>lt;sup>5</sup> ECOnorthwest analysis of CoStar data.

<sup>&</sup>lt;sup>6</sup> Trevor J. Barnes and Roger Hayter. "'The Little Town That Did': Flexible Accumulation and Community Response in Chemainus, British Columbia." *Regional Studies* 26, no. 7 (1992): 647-63.

# Industrial

Manufacturing (and warehousing) could add an incremental amount of new business activity.

# **Opportunities**

**Key Industries:** Manufacturing is a target industry that would benefit from Sweet Home's location along U.S. Route 20, which provides access to larger, urban markets.<sup>8</sup>

Laminated Timber: There is growing interest in developing a new type of wood manufacturing industry in Oregon. New research activities and public funding are available and more could become available for laminated timber manufacturing. There are current projects supporting workforce training, sustainable sourcing, and smart forestry.<sup>9</sup>

# Limitations

**Employment:** Jobs in the manufacturing industry have stalled (12 percent of total employment in 2021 with a 2 percent decline from 2014-2021).<sup>10</sup>

**Laminated Timber**: The impact of laminated timber manufacturing on Sweet Home is not certain. There is generally a lack of skilled labor force trained in laminated timber manufacturing, Moreover, related research activities are located mainly at the Port of Portland and universities.<sup>11</sup>

**Market Decline:** Industrial real estate market is growing weaker regionally. Rent growth has fallen to about 2 percent, below the typical range. Vacancy rate rose to 4.6 percent, above the typical range.<sup>12</sup> If the rents and rent growth remains low, the NSHA is unlikely to attract developer interest.

# High-Tech Outpost – Prineville, Oregon

The decline in the timber industry 30+ years ago led to the highest unemployment in Oregon. But Prineville attracted data centers to support the high-tech industry over the last 15 years. While other timber towns in Oregon pivoted to outdoor recreation and craft breweries, Prineville invested in an economy around data centers.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> Andrew Selsky. "Former Oregon lumber town rides digital wave to a comeback." *Associated Press*. July 26, 2016.



<sup>&</sup>lt;sup>8</sup> ECONorthwest, Sweet Home Economic Opportunities Analysis (EOA), April 2017.

<sup>&</sup>lt;sup>9</sup> Oregon Mass Timber Coalition. "Our Projects." https://www.masstimbercoalition.org/projects

<sup>&</sup>lt;sup>10</sup> ECOnorthwest analysis of Oregon Employment Department data.

<sup>&</sup>lt;sup>11</sup> Oregon Mass Timber Coalition.

<sup>&</sup>lt;sup>12</sup> ECOnorthwest analysis of CoStar data.

# Comparison of Relative Feasibility

# **Active Commercial**

There may be a site-specific opportunity for a new commercial use in the NSHA. It could be integrated within the community from both land use and transportation perspectives. It can complement existing community events and businesses. However, development costs will be relatively high, and likely higher with potential environmental remediation costs. It might be difficult to find a combination of tenants that generate enough market value to justify a new commercial development.

# Lodging and Recreation

A new lodging space scaled to likely visitor spending expectations could be feasible. While development costs will be relatively high, the City could support by providing complementary amenities and services to attract new visitors.

In contrast, the feasibility of a new lodging space with high levels of amenities, such as an onsite spa or an indoor pool, is very uncertain. The development costs will be higher. However, there is insufficient information about whether visitors who are generally looking to travel in the Willamette Valley area would be willing to spend significantly more to utilize a more luxurious lodging option in Sweet Home.

# Industrial

Industrial uses are generally much less costly to develop, though the costs could vary by the specific use. However, given the declining market for industrial uses in Sweet Home, the prospective value of a new industrial property (and feasibility) is expected to be low.

# Implications

A high-level review of the three land uses the City has expressed interest in shows challenges for each concept. Uses with greater market opportunity are more costly to build. A speculative development is unlikely, and some level of public subsidy is likely required to support a new development in the near future.

An alternative not explored in this analysis is warehousing. Small-scale warehousing (and distribution) is also a target industry.<sup>14</sup> Moreover, employment related to wholesale and retail trade has been very strong (24 percent of employment in 2021) and has grown well (35 percent between 2014 and 2021).<sup>15</sup> Still, this may not be a focus area for the City, possibly

<sup>&</sup>lt;sup>15</sup> ECOnorthwest analysis of Oregon Employment Department data.



<sup>&</sup>lt;sup>14</sup> ECONorthwest, Sweet Home Economic Opportunities Analysis (EOA), April 2017.

because it is not likely to create many jobs, especially those associated with skilled labor and economic security. Moreover, a trade sector with heavy freight movement could have an outsized impact on road repair needs in the future.

Therefore, given the challenges and uncertainties outlined above, the City of Sweet Home should pursue land use designations that allow multiple types of uses on the same site. Removing land use barriers would provide flexibility to prospective developers and even create opportunities for interim or temporary uses. Ultimately, a commercial mixed-use center that can support retail, food services, short-term stays, and light industrial businesses might be the most likely outcome in Sweet Home.

The new development will occur when the property owner, developer, and potential tenant(s) are aligned in their interests and investment readiness. This could also be led or influenced by the City through a master plan, which would contextualize a site-specific development with broader, city-wide improvements in services and diversification of land uses. Enhanced public spaces and recreational facilities—including an events center, a small park, or a market—could also be part of the master plan and benefit future developments. An excerpt below illustrates an example of how this is occurring in another city.

# **Revitalization at Port Gamble, Washington**

Port Gamble is undergoing a transformative redevelopment effort aimed at rejuvenating its economy while preserving its rich legacy. It was originally established in the 1850s by New England timber entrepreneurs and built as a company town for the Puget Mill Company to produce lumber for the California gold rush. For roughly 140 years, the mill churned out lumber, holding the title as the nation's longest-operating mill until it ceased operations in 1995. The decline in the timber industry has led economic challenges for the town.

The current redevelopment initiative, driven by a collaborative partnership involving private developers, local government entities, and community stakeholders, seeks to revitalize Port Gamble into a thriving, sustainable community. Central to this effort is the preservation of its historic charm and architectural heritage, which includes carefully restoring and repurposing existing buildings to maintain their historical significance.

The master plan for Port Gamble's redevelopment emphasizes a mix of land uses designed to enhance the town's livability and attractiveness to visitors. This includes plans for new residential units to support a diverse population, commercial spaces to foster local business growth, and recreational amenities to promote tourism and community engagement.

Key components of the 318-acre redevelopment project include infrastructure improvements such as road enhancements and utility upgrades, ensuring that the town can accommodate new development while maintaining its environmental integrity. The plan also includes



provisions for public spaces and parks, aimed at enhancing the quality of life for residents and visitors alike.

Community involvement played a crucial role in shaping the redevelopment vision, with ongoing input from local residents and stakeholders guiding the project's evolution. This collaborative approach aims to create a sustainable economic future for Port Gamble while honoring its unique history and character.

Overall, the Port Gamble redevelopment project represents a comprehensive effort to revitalize a historic community, stimulate economic growth through thoughtful development, and create a sustainable and vibrant destination that celebrates its past while looking towards the future.

